

METHOD AND APPARATUS FOR DETECTING LOW CONTRAST OBJECT IN A DIAGNOSTIC IMAGE

Abstract of Disclosure

The present invention is directed to a method and apparatus of objectively testing the low contrast performance of an imaging system. Images of a uniform phantom and images of a low contrast detectability phantom are reconstructed. Thereafter, a group of pixels from an image of the uniform phantom are removed and replaced with a group of pixels from an image of the LCD phantom. A user or test observer is then prompted to identify which quadrant of the first phantom image contains a group of pixels from the LCD phantom. An accuracy of a user response is then determined and conveyed to the user. The present invention is applicable with a number of imaging modalities including computer tomography, magnetic resonance imaging, PET, ultrasound, and the like.

Figures

Figure 1: A line graph showing the relationship between the number of figures and the number of pages. The x-axis represents the number of figures (0 to 10) and the y-axis represents the number of pages (0 to 10). The data points are (0, 0), (1, 1), (2, 2), (3, 3), (4, 4), (5, 5), (6, 6), (7, 7), (8, 8), (9, 9), and (10, 10). The graph shows a direct linear relationship where the number of pages increases by one for every additional figure.